REMARKS

Claims 28-30, 32-40 and 46-48 are pending in the application.

Claims 28-40 and 46-48 stand rejected.

Claims 28, 29, 32, and 34 have been amended. Support for this amendment can be found, at least, on page 3 of the specification. No new matter has been added by this amendment.

Claim 31 has been canceled.

Rejection of Claims under 35 U.S.C. §112

Claims 28-40 and 46-48 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, the rejection states that it "is not clear as to what being referring [sic] as 'first connector and second connector.'" Final Office Action, p. 2. The claims have been amended to explicitly cover a first optical connector and a second optical connector (emphasis added). Accordingly, Applicant believes that this rejection has been overcome.

Rejection of Claims under 35 U.S.C. §102

Claims 28-35 as best under stood are rejected under 35 U.S.C. § 102(b) as being anticipated by August et al. (U.S. 4,911,645). The cited art fails to anticipate, teach, or suggest a "first circuit board comprising... a first optical connector [and] a second circuit board comprising... a second optical connector configured to be mated to the first connector," as recited in amended claim 28. Accordingly, Applicant respectfully traverses this rejection.

Applicants note that the cited portions of August contain no mention of the word "optical." Furthermore, there is no suggestion within the cited portions of August to include any sort of optical signaling or associated components on the circuit boards described by August. Accordingly, the cited art clearly neither teaches nor suggests this feature of amended claim 28.

Applicant further notes that the pin connection taught in August could not function as an optical connection (e.g., as suggested by the Examiner on page 4 of the prior Office Action mailed February 9, 2006: "the pin connection disclosed by August et al is broadly readable as the optical connection and its function intended use such as transmitting signals"). The requirements for transmitting electrical signals (as done by the pin connection) are drastically different than the requirements for transmitting optical signals. In particular, transmission of optical signals involves transmitting light, which is quite different than simply making electrical contact. Thus, the mere fact that a reference discloses an electrical connection thus in no way teaches or suggests an optical connection.

Furthermore, as noted in the previous response, August does not teach or suggest two different connections of any type. Claim 28 describes two different connections: one that is formed by the first and second optical connector and another that is formed by the pin and the electrical contacts. August simply shows one type of connection: the electrical connection formed by the dual flex pins and the through-plated holes.

On page 3 of the previous Office Action mailed February 9, 2006, the Examiner equates element 102 of FIG. 1 of August with the first connector of claim 28. Similarly, the Examiner equates element 108 of FIG. 1 of August with the second connector of claim 28. Element 102 is a shuttle block and element 108 is a set of plated-through holes. "[D]ual flex pins 101 are perpendicularly affixed to shuttle block 102... Dual flex pins 101 are first inserted through plated-through holes 108 of pc board 103 and into plated-through holes 110 of connector board 105." August, col. 3, lines 62-68. Accordingly, shuttle block 102 is not part of either the "pc board 103" or the "connector board 105" disclosed in August. Instead, shuttle block is a separate element that is couples the two boards when August's dual flex pins 101 are inserted into plated-through holes 108 and 110. Thus, shuttle block 102 is not a "first connector" such as that recited in claim 1, since a circuit board does not comprise the shuttle block 102. Furthermore, the cited portions of August neither teach nor suggest such a first connector. Accordingly, for at least this reason, claim 28 is patentable over the cited art.

The cited art further fails to anticipate, teach, or suggest a first circuit board comprising a first electrical contact and a second circuit board comprising a second electrical contact, as recited in claim 28. Element 101 of FIG. 1 of August is equated with both the first electrical contact and the second electrical contact. Office Action mailed February 9, 2006, p. 3. Element 101 is a set of dual flex pins that are affixed to a shuttle block. August, col. 3, lines 62-65.

Element 101 is not part of either board (the pc board or the connector board) depicted in FIG. 1 of August. Additionally, it is clear that the same element (dual flex pins 101 here) could not be part of two separate circuit boards. Accordingly, element 101 anticipates neither "a first circuit board comprising a first electrical contact" nor "a second circuit board comprising a second electrical contact." For this reason, claim 28 is further patentable over the cited art.

Furthermore, the cited art does not anticipate, teach, or suggest "at least one pin [that] is perpendicular to the first connection between the first connector and the second connector," as recited in claim 28. On page 3 of the Office Action mailed February 9, 2006, the Examiner states that: "pins 115 is perpendicular to the first connector 102 of the first circuit board 103." However, it is irrelevant whether a pin is perpendicular to a connector, since claim 28 recites a pin that is perpendicular to a connection between a pair of connectors. The cited art neither teaches nor suggests such a configuration. Furthermore, as noted above, element 102 of August neither teaches nor suggests a first connector (as the term is used in claim 28), and thus the cited art does not even show a pin that is perpendicular to a first connector.

Additionally, the cited art would not be expected to teach or suggest at least one pin, configured to make electrical contact with a first electrical contact of a first circuit board and a second electrical contact of a second circuit board, that is perpendicular to a first connection, which transmits at least one signal between the first circuit board and the second circuit board. In August, the only connection between the boards 103 and 105 is the electrical contact that is formed when the dual flex pins 101 are inserted into plated-through holes 108 and 110. There is clearly no teaching or suggestion to have at least one pin be perpendicular to another connection, since there is no other connection (other than the one formed by the dual-flex pins themselves) usable to transmit a signal between the boards. In other words, given that the only contact between the boards in August's system is the electrical contact formed by the dual-flex pins, there is no suggestion to have those dual-flex pins be perpendicular to another connection between the boards.

For at least the foregoing reasons, claim 28 is patentable over the cited art. Dependent claims

Rejection of Claims under 35 U.S.C. §103

Claim 35 is rejected under 35 U.S.C. § 103(a) as being unpatentable over August. Claims 36 and 46-48 are rejected under 35 U.S.C. § 103(a) as being unpatentable over August in view of Imamura (5,219,292). These claims are patentable over the cited art for at least the foregoing reasons presented above with respect to claim 28.

CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5087.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 24, 2006.

Brenna A Brock 10/24/2006

Attorney for Applicant(s) Date of Signature

Respectfully submitted,

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